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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/746,918	12/22/2000	Gopal Parupudi	MSI-69SUS	2766

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EXAMINER

NGUYEN, DUC M

ART UNIT	PAPER NUMBER
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2685

DATE MAILED: 04/09/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/746,918

Applicant(s)
Parupudi et al

Examiner
Duc Nguyen

Art Unit
2685



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Feb 5, 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-27, 29-48, and 50-58 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-27, 29-48, and 50-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

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DETAILED ACTION

This action is in response to applicant's response filed on 2/5/03. Claims 2-27, 29-48, 50-58 are now pending in the present application.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 48 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter

which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The limitation of "using **only** location information that it receive and its on-board componentry" as recited in the claim is not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

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(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

4. Claims 2-3, 5-9, 11, 13-16, 24-27, 29-30, 54-55, 57 are rejected under 35 U.S.C. 102(a) as being anticipated by **Te-eni** (PCT Pu. Number **WO 99/55102**).

Regarding claim 5, **Te-eni** discloses a mobile terminal (cellular phone) capable of executing location-related services such as phone settings based on different environments such as hospital airplane (see col. 3, line 22 - col. 4, line 14), whereas an application interface is configured to wirelessly receive information that is associated with the phone's context (see col. 21, lines 1-4), which would include all the claimed limitations.

Regarding claims 2-3, 6-9, 11, 13-16, 24-27, 29-30, 54-55, 57, they are rejected for the same reason as set forth in claim 5 above. In addition, **Te-eni** discloses

- configured to receive multiple different context providers (i.e, hospital, airplane, cinema halls, see col. 3, lines 22-28);
- set phone on or off (MS shut down, see col. 21, lines 1-4);
- sound or vibration would read on "ringer mode on/off" (see col. 21, lines 1-4);
- computer-readable media (inherently for a mobile phone with a CPU);

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- change behavior when no longer at the current location (inherently feature in order to utilize such location-based services);

- call forwarding behavior (see mailbox, col. 21, lines 8-9 and col. 14, line s 13-15);

- information pertains to a user of the cellular phone (see Table 1, and col. 13, line 22 - col. 14, line 6). Here, each user receives different context information.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 17-19, 21-23, 58 are rejected under 35 U.S.C. 103(a) as being unpatentable by **Te-
eni**.

Regarding claim 17, it is rejected for the same reason as set forth in claim 5 above. In addition, since a mobile phone that uses different methods for obtaining accuracy of location information is known in the art, and since **Te-
eni** also suggests different methods are used for obtaining accuracy of location information (see col. 10, line 27 - col. 12, line 1), it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above teaching of **Te-
eni** for the mobile phone to use different form of location information for ascertain its location, for improving location information accuracy.

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Regarding claims **18-19, 21-23**, they are rejected for the same reason as set forth in claim **5** above. In addition, **Te-eni** discloses

- phone on or off (MS shut down, see col. 21, lines 1-4);
- sound or vibration would read on “ringer mode on/off” (see col. 21, lines 1-4);
- computer-readable media (inherently for a mobile phone with a CPU);
- change behavior when no longer at the current location (inherently feature in order to utilize such location-based services);
- call forwarding behavior (see mailbox, col. 21, lines 8-9 and col. 14, lines 13-15);
- information pertains to a user of the cellular phone (see Table 1, and col. 13, line 22 - col. 14, line 6).

Regarding claim **58**, it is rejected for the same reason as set forth in claim **17** above.

7. Claims **10, 12, 20** are rejected under 35 U.S.C. 103(a) as being unpatentable by **Te-eni** in view of **Finke-Anlauff**.

Regarding claim **10**, **Te-eni** discloses all the claimed limitations, see claim **5** above, except for clearly disclosing the pitch of a ringer. However, **Finke-Anlauff** discloses phone settings for different locations wherein the pitches of a ringer are set according to locations (see Fig. 3). Since **Te-eni** discloses different phone settings at different locations, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of **Finke-Anlauff** to **Te-eni** for setting the pitches of a ringer at different locations as

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well, for audibly alerting a user of an incoming call at the best performance for each environment within which it is placed.

Regarding claim 12, **Te-eni** discloses all the claimed limitations, see claim 5 above, except for the step of using phone settings that are resident on the cellular phone to modify the setting. However, when a phone setting is switched from ring to vibration mode or from vibration to ring mode depending on the user location, it would have been obvious that such mode of settings (i.e, the ring volume or the vibration frequency) are resided in the phone as disclosed by **Finke-Anlauff** (see Fig. 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of **Finke-Anlauff** to **Te-eni** for setting ring volume or the vibration frequency at the phone in advance, so that such setting would be utilized upon executing an alerting mode when receiving a command from the local management (see **Te-eni**, col. 21, lines 1-4).

Regarding claim 20, the claim is rejected for the same reason as set forth in claims 10, 17 above.

8. Claim 36, 41, 42 is rejected under 35 U.S.C. 103(a) as being unpatentable by **Kovac et al** ("Adaptive Mobile Access to Context-aware Service", IEEE 1999, pp. 190-201).

Regarding claim 36, 41, 42, **Kovac** discloses a method for mobile access to context-aware service (see pp. 190-201), wherein based on location awareness information, the behavior

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of a mobile's user's preferences is modified (i.e, phone setting) depend on environment at such location (see col. 2 of page 190 on silent vibration in a concert), and user profile (see section 3.3 Customizable Application, page 192), wherein **Kovac** further discloses different classes for context information (see section 5, page 195). Since each class would obviously comprise attributes (i.e, call indications or phone settings) in order to modify behaviors of a mobile device according to the location-awareness as mention above, the claimed limitation are made obvious by **Kovac**, for sending a context-information comprising classes and attributed as claimed, in order to modify the behavior of a mobile device according to its location.

9. Claim 31-33, 35, 37-38, 40, 43-47 are rejected under 35 U.S.C. 103(a) as being unpatentable by **Kovac** in view of **Te-eni**.

Regarding claim 31, **Kovac** discloses all the claimed limitations, see claim 5 above, except for clearly disclosing one or more transmitter at the location where a particular phone behavior is desired. However, in an analogous art, **Te-eni** discloses such the above limitation for changing the behavior of the cellular phone in regulated areas (see Front end in Figs. 2-3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of **Te-eni** to **Kovac** for placing one or more transmitter at the location as claimed, in order to restrict communication usage in regulated areas.

Regarding claims 32-33, 35, 37-38, 40, 43-47, the claims are rejected for the same reason as set forth in claim 31 above. In addition, **Te-eni** further discloses features which

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- set phone on or off (MS shut down, see col. 21, lines 1-4);
- switching to sound or vibration mode which would read on “ringer mode on/off” (see col. 21, lines 1-4);
- change behavior when no longer at the current location (inherently feature in order to utilize such location-based services);
- comprise call forwarding behavior (see mailbox, col. 21, lines 8-9 and col. 14, lines 13-15);
- comprise information pertains to a user of the cellular phone (see Table 1, and col. 13, line 22 - col. 14, line 6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further incorporating the above teaching of **Te-eni** to **Kovac** for providing features as claimed, so that the location-based service can be effectively utilized.

10. Claims **34, 39** are rejected under 35 U.S.C. 103(a) as being unpatentable by **Kovac** in view of **Te-eni** and further in view of **Finke-Anlauff**.

Regarding claims **34, 39**, **Te-eni** discloses all the claimed limitations, see claim **31** above, except for clearly disclosing the pitch of a ringer. However, **Finke-Anlauff** discloses phone settings for different locations wherein the pitches of a ringer are set according to locations (see Fig. 3). Since **Te-eni** discloses different phone settings at different locations, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the

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above teaching of **Finke-Anlauff** to **Te-eni** for setting the pitches of a ringer at different locations as well, for audibly alerting a user of an incoming call at the best performance for each environment within which it is placed.

11. Claims **48, 50** are rejected under 35 U.S.C. 103(a) as being unpatentable by **Kuwahara et al** (US Patent Number **6,389,288**).

Regarding claim **48**, **Kuwahara** discloses a mobile terminal (cellular phone) capable of executing location-related services such as phone settings, call settings (see Figs. 1, 13, and col. 9, line 59 - col. 10, line 40). Here, it is clear that unless call answer options are desired, only reported location and on-board componentry (i.e, refs. 1-10 in Fig. 1) are used for adjusting phone setting. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify **Kuwahara** for using only reported location and on-board componentry for adjusting phone setting, for cost saving by not subscribe to call answer service. Fig. 28

Regarding claim **50**, **Kuwahara** discloses a method for determining whether the reported location of a mobile phone is matched with a user-defined area vector name in order to execute a service setting for such user-defined area. Here, since each user-defined area comprises a plurality of zones (see Fig. 21), hence, when receiving the reported location of a zone, it would have been obvious to one of ordinary skill in the art to use a hierarchical traversable tree structure in order to traverse from the reported location of the zone area to get the corresponding user-defined area vector name. Therefore, it would have been obvious to one of ordinary skill in the

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art at the time the invention was made to modify **Kuwahara** for using a hierarchical traversable tree structure as claimed, in order to obtain the corresponding user-defined area effectively from the reported location.

12. Claims 4, 51- 53, 56, are rejected under 35 U.S.C. 103(a) as being unpatentable by **Te-eni**.

Regarding claims 4, 51, 56, **Te-eni** discloses all the claimed limitations, see claim 5 above, except for a hierarchical traversable tree structure associated with phone context. However, since the use of hierarchical traversable tree structure is known, hence, when receiving the instructed call indication mode (i.e, switching from ring to vibration mode), it would have been obvious to one of ordinary skill in the art to use a hierarchical traversable tree structure in order to traverse from one mode to another mode to set the phone to operate in the instructed mode. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify **Te-eni** for using a hierarchical traversable tree structure as claimed, in order to traverse effectively from one mode to another mode, to set the phone to operate accordingly to the instructed mode.

Regarding claims 52-53, the claims are rejected for the same reason as set forth in claim 51 above. In addition, **Te-eni** further discloses

- configured to receive multiple different context providers (i.e, hospital, airplane, cinema halls, see col. 3, lines 22-28);

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- information pertains to a user of the cellular phone (see Table 1, and col. 13, line 22 - col. 14, line 6).

Response to Arguments

13. Applicant's arguments with respect to claims 2-27, 29-48, 50-58 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

14. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for formal communications intended for entry)

(for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington VA, Sixth Floor (Receptionist).

Any inquiry concerning this communication or communications from the examiner should be directed to Duc M. Nguyen whose telephone number is (703) 306-4531, Monday-Thursday (9:00 AM - 5:00 PM). Or to Vivian Chin (Supervisor) whose telephone number is (703) 308-6739.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Duc M. Nguyen
Mar 25, 2003

